



**[4910-13-P]**

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2012-1018; Directorate Identifier 2011-SW-052-AD;**

**Amendment 39-17204; AD 2012-19-09]**

**RIN 2120-AA64**

**Airworthiness Directives; Eurocopter France Helicopters**

**AGENCY:** Federal Aviation Administration (FAA), Department of Transportation (DOT).

**ACTION:** Final rule; request for comments.

**SUMMARY:** We are adopting a new airworthiness directive (AD) for Eurocopter France (Eurocopter) Model EC 155B, EC155B1, SA-365N1, AS-365N2 and AS 365 N3 helicopters to require visually inspecting the tail rotor hub (TRH) for a crack and removing the TRH if a crack exists. This AD is prompted by reports of cracks on two TRHs. These actions are intended to prevent the tail rotor from jamming, which could lead to reduced or loss of control of the helicopter.

**DATES:** This AD becomes effective [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

We must receive comments on this AD by [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** You may send comments by any of the following methods:

- **Federal eRulemaking Docket:** Go to <http://www.regulations.gov>. Follow the

online instructions for sending your comments electronically.

- Fax: 202-493-2251.
- Mail: Send comments to the U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590-0001.
- Hand Delivery: Deliver to the “Mail” address between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

**EXAMINING THE AD DOCKET:** You may examine the AD docket on the Internet at <http://www.regulations.gov> or in person at the Docket Operations Office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the economic evaluation, any comments received, and other information. The street address for the Docket Operations Office (telephone 800- 647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

For service information identified in this AD, contact American Eurocopter Corporation, 2701 N. Forum Drive, Grand Prairie, TX 75052; telephone (972) 641-0000 or (800) 232-0323; fax (972) 641-3775; or at <http://www.eurocopter.com/techpub>. You may review the referenced service information at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137.

**FOR FURTHER INFORMATION CONTACT:** Robert Grant, Aviation Safety Engineer, Standards Staff, Rotorcraft Directorate, FAA, 2601 Meacham Blvd., Fort Worth, Texas 76137; telephone 817-222-5328; email [robert.grant@faa.gov](mailto:robert.grant@faa.gov).

## **SUPPLEMENTARY INFORMATION:**

### **Comments Invited**

This AD is a final rule that involves requirements affecting flight safety, and we did not provide you with notice and an opportunity to provide your comments prior to it becoming effective. However, we invite you to participate in this rulemaking by submitting written comments, data, or views. We also invite comments relating to the economic, environmental, energy, or federalism impacts that resulted from adopting this AD. The most helpful comments reference a specific portion of the AD, explain the reason for any recommended change, and include supporting data. To ensure the docket does not contain duplicate comments, commenters should send only one copy of written comments, or if comments are filed electronically, commenters should submit them only one time. We will file in the docket all comments that we receive, as well as a report summarizing each substantive public contact with FAA personnel concerning this rulemaking during the comment period. We will consider all the comments we receive and may conduct additional rulemaking based on those comments.

### **Discussion**

We are adopting a new AD for Eurocopter EC 155B, EC155B1, SA-365N1, AS-365N2 and AS 365 N3 helicopters. Eurocopter reported that a technician found cracks on the TRH during an inspection of a Model AS-365 helicopter equipped with a 10-blade TRH. This AD requires repetitive visual inspections of the TRH for a crack. Eurocopter initially required a visual inspection of the TRH every 110 hours, but reduced that requirement to 55 flight hours after cracks were found on a second hub. Eurocopter is investigating the cause of the cracks.

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union, has issued EASA AD No. 2011-0144, dated July 26, 2011, to correct this unsafe condition for Eurocopter Model EC 155B, EC155B1, SA-365N1, AS-365N2 and AS 365 N3 helicopters. EASA states that if a TRH crack is not detected and corrected, the tail rotor could jam, leading to a reduction or loss of control of the helicopter. Pending further investigation, the EASA AD requires repetitive inspections of the TRH every 55 flight hours. EASA considers the actions in its AD to be interim measures and expects further AD actions will follow.

#### **FAA's Determination**

These helicopters have been approved by the aviation authority of France and are approved for operation in the United States. Pursuant to our bilateral agreement with France, EASA, its technical representative, has notified us of the unsafe condition described in the EASA AD. We are issuing this AD because we evaluated all information provided by EASA and determined the unsafe condition exists and is likely to exist or develop on other helicopters of these same type designs.

#### **Related Service Information**

Following the report of cracks found on the TRH of a Model AS-365 helicopter, Eurocopter issued Alert Service Bulletin (ASB) No. EC 155-05A021, Revision 0, dated April 11, 2011, for Model EC 155B and EC155B1 helicopters, and ASB No. AS365-05.00.60, Revision 0, dated April 11, 2011, for Model SA-365N1, AS-365N2 and AS 365 N3 and some military helicopters. After a second report of TRH cracks, the ASBs were revised, dated July 20, 2011, to mandate and reduce the repetitive inspection interval from 110 flight hours to 55 flight hours.

The ASBs call for visually inspecting the TRH for cracks and, if cracks are found, removing the TRH. EASA classified these ASBs as mandatory and issued AD No. 2011-0144 to ensure the continued airworthiness of these helicopters.

### **AD Requirements**

This AD requires visually inspecting the TRH for a crack within 55 hours time in service (TIS) and, if a crack exists, removing the TRH from service. This inspection must be repeated at intervals not to exceed 55 hours TIS.

### **Interim Action**

We consider this AD to be an interim action because Eurocopter is investigating the cause of TRH cracks. If a final action is later identified, we might consider additional rulemaking.

### **Costs of Compliance**

We estimate that this AD will affect 34 helicopters of U.S. Registry and that labor costs will average \$85 a work-hour. We expect that it will take 1 work-hour to visually inspect the TRH for a crack, and that helicopters will average 5 inspections per year. Thus, we estimate a total annual cost of \$425 per helicopter, and \$14,450 for the U.S. operator fleet.

### **FAA's Justification and Determination of the Effective Date**

Providing an opportunity for public comments prior to adopting these AD requirements would delay implementing the safety actions needed to correct this known unsafe condition. Therefore, we find that the risk to the flying public justifies waiving notice and comment prior to the adoption of this rule, because the required corrective actions must be accomplished within 55 hours TIS, a very short time period based on the

average utilization rate of the highest usage helicopter model.

Since an unsafe condition exists that requires the immediate adoption of this AD, we determined that notice and opportunity for public comment before issuing this AD are impractical and contrary to the public interest and that good cause exists for making this amendment effective in less than 30 days.

### **Authority for This Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

### **Regulatory Findings**

We determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed, I certify that this AD:

1. Is not a “significant regulatory action” under Executive Order 12866;
2. Is not a “significant rule” under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);
3. Will not affect intrastate aviation in Alaska to the extent that it justifies making a regulatory distinction; and
4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared an economic evaluation of the estimated costs to comply with this AD and placed it in the AD docket.

#### **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

#### **Adoption of the Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

#### **PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

#### **§ 39.13 [Amended]**

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

2012-19-09 **EUROCOPTER HELICOPTERS:** Amendment 39-17204;

Docket No. FAA-2012-1018; Directorate Identifier 2011-SW-052-AD.

**(a) Applicability.**

This AD applies to Eurocopter Model EC 155B, EC155B1, SA-365N1, AS-365N2 and AS 365 N3 helicopters, with a tail rotor hub (TRH) part number 365A33351100, 365A33351101, or 365A33351102 installed, certificated in any category.

**(b) Unsafe Condition.**

This AD defines the unsafe condition as a crack in the TRH that could lead to a tail rotor jam, and subsequent reduced or loss of control of the helicopter.

**(c) Effective Date.**

This AD becomes effective [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**(d) Compliance.**

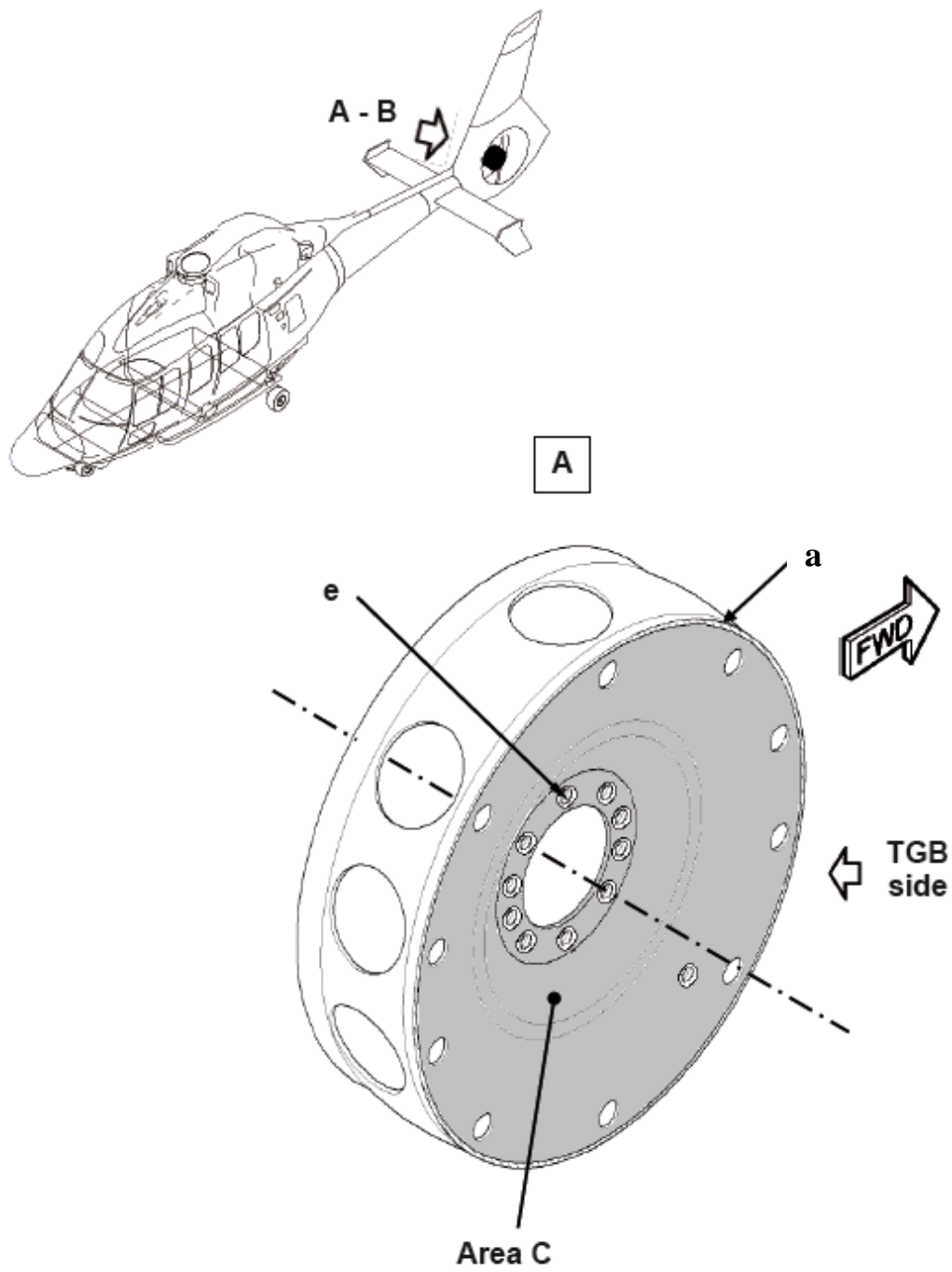
You are responsible for performing each action required by this AD within the specified compliance time.

**(e) Required Actions.**

(1) Within 55 hours time-in-service (TIS), and thereafter at intervals not to exceed 55 hours TIS, using a light, visually inspect the TRH for a crack in the entire area shown as Area C of the TRH (a) in Figure 1 to paragraph (e)(1) of this AD. The inspection area is on the tail gearbox (TGB) side of the TRH. The TGB is shown as (c) in Figures 2 and 3 to paragraph (e)(1) of this AD. You must pay particular attention to the area around the screws, shown as (e) in Figure 3 to paragraph (e)(1) of this AD, and the TRH between the lower part of the TGB and its fairing, shown as (d) in Figures 2 and 3 to paragraph (e)(1) of this AD, using details D and E of Figure 3 to paragraph (e)(1) of this AD. You must

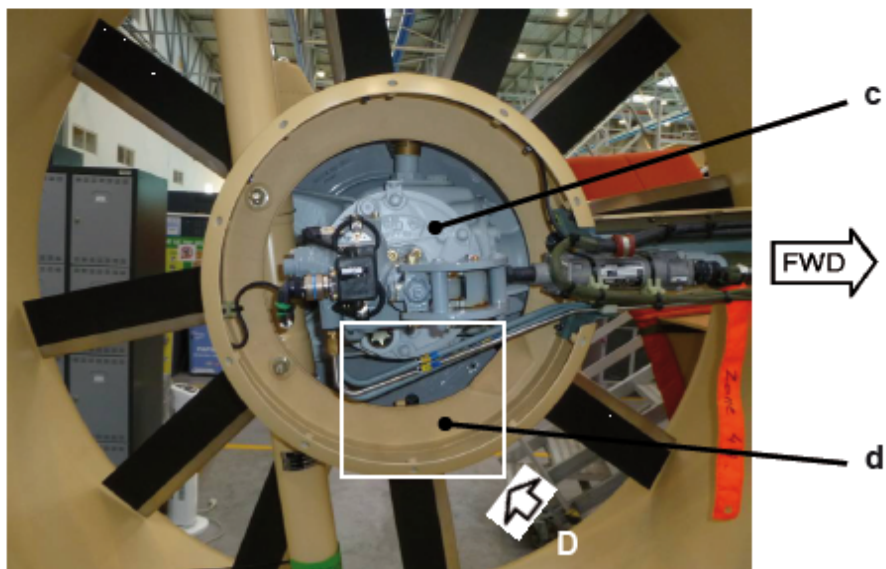


turn the tail rotor by hand to inspect the entire Area C.

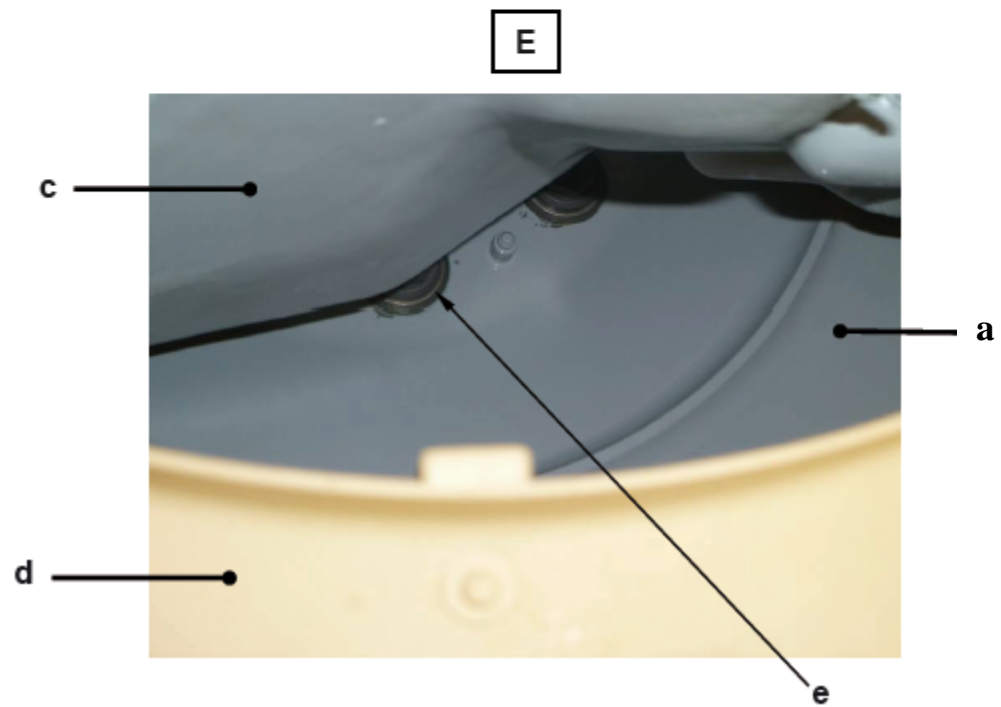
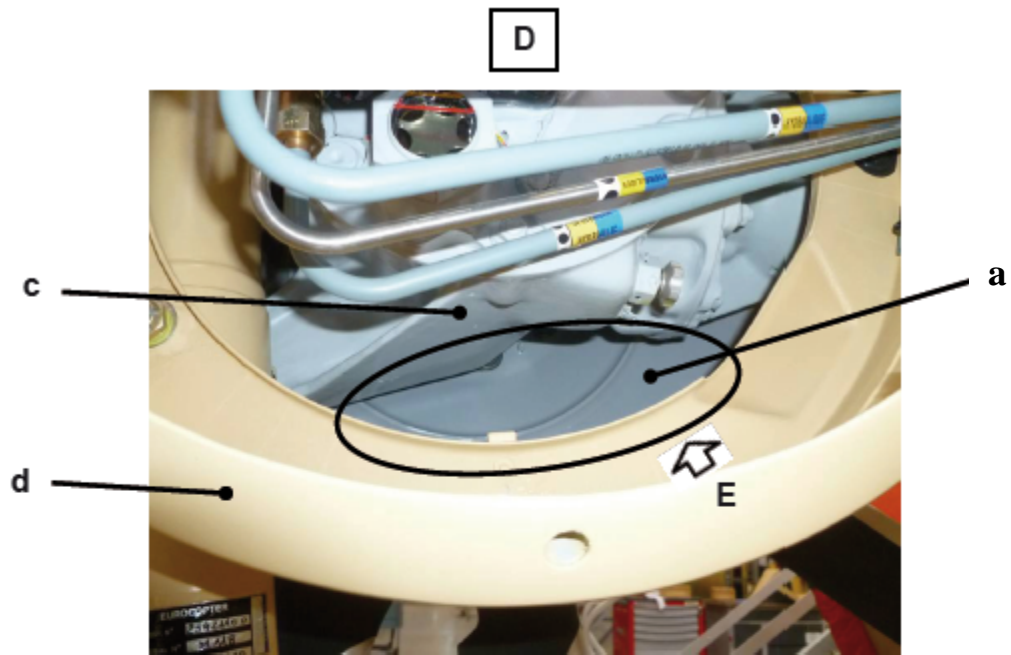


**Figure 1 to Paragraph (e)(1) TRH Hub**

**B**



**Figure 2 to Paragraph (e)(1) Location of the area to be inspected (Area C)**



**Figure 3 to Paragraph (e)(1) Visual Inspection of Area C**

(2) If there is a crack on the TRH, remove the TRH from service.

**(f) Special flight permits.**

No special flight permits will be permitted.

**(g) Alternative Methods of Compliance (AMOCs).**

(1) The Manager, Safety Management Group, FAA, may approve AMOCs for this AD. Send your proposal to: Robert Grant, Aviation Safety Engineer, Standards Staff, Rotorcraft Directorate, FAA, 2601 Meacham Blvd., Fort Worth, Texas 76137; telephone 817-222-5328; email robert.grant@faa.gov.

(2) For operations conducted under a 14 CFR part 119 operating certificate or under 14 CFR part 91, subpart K, we suggest that you notify your principal inspector, or lacking a principal inspector, the manager of the local flight standards district office or certificate holding district office, before operating any aircraft complying with this AD through an AMOC.

**(h) Additional Information.**

(1) Eurocopter Alert Service Bulletin (ASB) No. AS365-05.00.60, Revision 1, dated July 20, 2011, and Eurocopter ASB No. EC 155-05A021, Revision 1, dated July 20, 2011, which are not incorporated by reference, contain additional information about the subject of this AD. For service information identified in this AD, contact American Eurocopter Corporation, 2701 N. Forum Drive, Grand Prairie, TX 75052; telephone (972) 641-0000 or (800) 232-0323; fax (972) 641-3775; or at <http://www.eurocopter.com/techpub>. You may review a copy of the service information at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137.

(2) The subject of this AD is addressed in European Aviation Safety Agency (EASA) AD No. 2011-0144, dated July 26, 2011.

**(i) Subject.**

Joint Aircraft Service Component (JASC) Code: 6420, Tail Rotor Head.

Issued in Fort Worth, Texas, on September 14, 2012.

Lance T. Gant,

Acting Manager, Rotorcraft Directorate,  
Aircraft Certification Service.

[FR Doc. 2012-23448 Filed 09/24/2012 at 8:45 am; Publication Date: 09/25/2012]